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REMARKS

Claims 14 and 17 have been amended to clarify that the determination of whether to schedule the connection in a peak rate limiting scheduler or in a WFQ scheduler is based on a determination of whether the connection would exceed its rate limit if it were serviced immediately. The Applicant respectfully submits that this amendment is merely a clarification, as anyone skilled in the art would appreciate that scheduling is carried out on cells which have not yet been serviced.

The claims have also been amended such that the scheduling is carried out by a peak rate limiting shaper and a WFQ scheduler, rather than by a peak rate limiting shaper queue and a WFQ scheduler queue, to more properly indicate the entities performing the scheduling. Support for this amendment is found at lines 15 to 19 of page 14 of the description.

The Examiner has objected to claims 14-19 as not complying with 35 U.S.C. 103(a) on the grounds that the subject matter of the claims would have been obvious having regard to U.S. Patent 5,831,971 issued to Bonomi *et al.* in view of U.S. Patent 5,999,534 issued to Kim. Claim 14 includes scheduling the connection in a peak rate limiting shaper if the connection would exceed its rate limit, and scheduling the connection in a weighted-fair-queuing scheduler if the connection would not exceed its rate limit. Bonomi does not teach or suggest these two distinct elements. The Examiner has cited claim 9 and column 7 lines 52-59 of Bonomi as teaching these two elements. However, claim 9 of Bonomi does not teach scheduling the connection in a weighted-fair-scheduling scheduler if the connection would not exceed its rate limit. Claim 9 of Bonomi recites that the virtual finishing time assigned to the incoming cell is determined based on weighted fair queuing. Referring to claim 6 of Bonomi, on which claim 9 depends, it is seen that a virtual finishing time is assigned to the incoming cell (the third element of claim 6) to any cell to be placed on an empty queue, independent of whether the conformance time for the incoming cell indicates that the cell is conforming. A different cell altogether (the "selected cell"), being the cell having the smallest virtual finishing time from among all the head-of-line cells in all queues, is checked for conformance, and if the selected cell is non-conforming then the selected cell is rescheduled.

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The method taught by Bonomi schedules all cells (in the variation disclosed in claim 9 of Bonomi) using a WFQ scheduler. When a cell is to be transmitted, the shaper (what Bonomi appears to call the entire system) determines whether the cell is conforming. If the cell is not conforming, the cell is re-scheduled. In contrast, claim 14 of the present application first determines whether a connection (not a cell) would be conforming if serviced immediately, and based on this determination schedules the connection using either a peak rate limiting scheduler or a WFQ scheduler. The effect of the method of claim 14 is that if a connection would be serviced too quickly, the connection is scheduled such that it will not be serviced until at least its theoretical emission time. If the connection would not be serviced too quickly, the connection is scheduled to be serviced using WFQ in order to take advantage of unused bandwidth in a fair manner. In this way, the method of claim 14 is work-conserving and fair while still limiting the servicing rate of connections.

Claim 17 of the present application is directed to an apparatus having similar limitations as described above for claim 14. Claims 15, 16, 18, and 19 are variously dependent on claims 14 and 17, and include the same limitations discussed above. Since neither Bonomi nor Kim teach or suggest scheduling a connection in a peak rate limiting shaper if the connection would exceed its rate limit if the connection were serviced immediately, neither Bonomi nor Kim, either alone or in combination, teach every element of the claims. The Applicant therefore respectfully submits that a *prima facie* case of obviousness has not been established against claims 14-19.

In view of the foregoing, it is believed that the claims as amended herein are in condition for allowance. Reconsideration and action to this end is respectfully requested.

Respectfully submitted,



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